

**Acute watery diarrhoea in Southern Sudan – 5 March 2006**

As of 3 March 2006, the Acute Watery Diarrhoea (AWD) Task Force in Juba led by the Federal Ministry of Health and the Ministry of Health of the Government of Southern Sudan, in collaboration with WHO and other partners, reported a total number of 5,634 cases and 127 deaths (case fatality rate 2.25%) from acute watery diarrhoea in Southern Sudan. These cases were reported between 28 January and 3 March 2006. All reported cases are concentrated in Yei and Juba towns of Southern Sudan. *Vibrio cholerae inaba* has been laboratory confirmed in the stool samples collected from a selected number of suspected cases of acute watery diarrhoea reported from both Yei and from Juba.

Town	Date the first "index" case was reported	Cumulative number of cases reported till date	Cumulative number of deaths reported till date	Overall case-fatality rate
Yei	28/01/06	1,748 (through 02/03/2006)	52 (through 02/03/2006)	2.97%
Juba	06/02/06	3,886	75	1.93%
<b>TOTAL</b>		<b>5,634</b>	<b>127</b>	<b>2.25%</b>

Reports of acute watery diarrhea have been received from areas surrounding Juba, namely Jebel Lado, Kajo-Kegi, Lekongole, Pibor, Bor, Terekeka, Mongella, Torit, Lafon, Lui, Jebelein, and Tijor (Rokon). *Vibrio cholerae inaba* has been laboratory confirmed from stool specimens from Kajo-Kegi, Terekeka, Bor and Pibor. Laboratory tests are continuing for all other locations.

Place	Total Cases	Total Deaths
Jebel Lado	37	11
Kajo-Kegi	2	0
Lekongole	1	0
Pibor	15	1
Bor	11	1
Terekeka	50	3
Mongella	14	5
Torit	380	25
Lafon	8	2
Lui	2	0
Jebelein(SPLA camp on road to Nimule)	17	0
Tijor (Rokon)	10	7

To break the chain of transmission, the Federal Ministry of Health (FMOH), the Ministry of Health of the Government of Southern Sudan (MoH/GoSS), WHO, UN agencies, various NGOs and other partners are continuing joint public health response operations for outbreak containment and limiting the spread of the disease amongst the susceptible population:

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- ? **Coordination:** A task force has been formed with the Undersecretary of the MoH of the GoSS in the chair to coordinate overall public health response to the outbreak.
  
- ? **Surveillance:** Actions undertaken to strengthen surveillance and reporting system include:
  - ? The use of standard case definition for reporting of all suspected cases of AWD;
  - ? Nine (9) fixed surveillance sites are now operational in Juba reporting cases of all suspected cases of acute watery diarrhea (AWD) on a 24 hour-basis and a few more sites are in the process of becoming operational;
  - ? Line listing of all reported cases, meeting the case definition, and data analysis of the line listed data are continuing on a daily basis in order to better understand the changing epidemiological pattern and transmission trend of the outbreak;
  - ? Mapping of all incoming data are also continuing to identify high risk areas for targeted chlorination and aggressive hygiene promotion;
  - ? Epidemiological investigation to gather more valid information on the epicenter as well as the source of this outbreak has been completed on 1 March 2006;
  - ? Systematic collection of stool samples for laboratory testing is continuing in order to understand the circulating pattern as well as the antibiotic sensitivity pattern of the pathogen causing the outbreak.
  
- ? **Case management:** Actions undertaken to strengthen uniform case management include:
  - ? Distribution of case management guidelines to all health services providers;
  - ? Periodic monitoring for strict compliance of standard case management protocols by all Cholera Treatment Centres;
  - ? Three (3) Cholera Treatment Centers have been set up in Juba town combined with two other existing facilities (police and military hospitals) to improve access to proper treatment;
  - ? Estimation of needs for essential drugs and emergency supplies for case management of AWD has been completed and based on past consumption pattern of rehydration supplies, a “critical stock value” for replenishment of depleted supplies has been determined towards more efficient management of medical supplies chain for AWD.
  
- ? **Environmental control measures:** Actions undertaken to strengthen environmental control measures include the followings:
  - ? Chlorination of river water (used by tanker trucks and individuals filling jerry cans) and the city distribution system continues. Adjustments are being made to the chlorine doses being used.
  - ? With respect to jerry can chlorination at boreholes, 116 of 260 are now being covered (data as of 28 February 2006). Thirty-three (33) of the 41 boreholes/hand pumps in Kator have chlorination caretakers. The area with the largest gap, identified, is Munuki (which includes Custom’s Market) where 34 out of 152 boreholes have chlorine coverage. MSF-E has agreed to provide assistance to WES in the Custom’s Market area to fill technical gaps.
  - ? Tanker trucks, boreholes/hand pumps and the city network continue to be chlorinated.
  - ? Water supply, sanitation and hygiene control efforts are expected to continue for at least another two weeks. At the end of the two weeks, an evaluation of the situation is expected to take place.
  - ? Emphasis is now on systematic monitoring of residual chlorine levels in the various water supplies (tankering, boreholes, and network). Supplies for monitoring, namely comparators with reagents, are limited among partners, but efforts are being made to monitor with the few comparators available.



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- ? Collection points at the river have been organized so that water retrieval occurs upstream from clothes washing, bathing and swimming.
- ? Hygiene promotion activities continue, including taxi and radio broadcasts, as well as home visits. Over 104,000 people have been visited by hygiene promoters in Juba town and in the adjoining areas.
- ? Gumbo area will receive 30 Sudanese Red Crescent hygiene promotion volunteers as this area is especially difficult to reach.

**For further information:**

<http://www.emro.who.int/sudan/>